

# **2000 Toxics Release Inventory**

# **OKLAHOMA**

### Reported Releases and Waste Management Activities (in pounds)

	Original Industry	New Industry	Total
On-site Releases	20,670,359	8,375,349	29,045,708
Air Emissions	17,304,265	1,421,108	18,725,373
Surface Water Discharges	2,508,227	10,762	2,518,989
Underground Injection Class I Wells	72,393	2,388,544	2,460,937
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	117,115	2,537,743	2,654,858
Other On-site Land Releases	668,359	2,017,193	2,685,551
Off-site Releases (Transfers Off-site to Disposal)*	3,009,231	947,927	3,957,158
Total On- and Off-site Releases	23,679,590	9,323,277	33,002,867
Recycled On-site	40,943,114	0	40,943,114
Recycled Off-site	21,947,901	23,144	21,971,045
Energy Recovery On-site	532,795	0	532,795
Energy Recovery Off-site	1,228,440	11,720	1,240,160
Treated On-site	38,935,754	7,270,590	46,206,344
Treated Off-site**	1,893,001	3,001	1,896,002
Quantity Released On- and Off-site***	23,582,394	9,303,117	32,885,512
<b>Total Production-related Waste Managed</b>	129,063,399	16,611,572	145,674,972
Non-production-related Waste Managed	148,799	291	149,090
<b>Transfers Off-site for Further Waste Manag</b>	gement/Disposal		
Recycling	21,790,248	23,171	21,813,419
Energy Recovery	1,176,710	11,230	1,187,940
Treatment	481,340	3,522	484,862
Publicly Owned Treatment Works (POTWs)	1,392,904	5	1,392,909
Metals and Metal Compounds*	12,675	5	12,680
Non-metal TRI Chemicals**	1,380,229	0	1,380,229
Other Off-site Transfers****	1,371	0	1,371
Transfers Off-site to Disposal	3,090,485	948,590	4,039,075
(not including metals to POTWs)			
<b>Total Transfers Off-site for Further Waste</b>	27,933,058	986,517	28,919,576
Management/Disposal			

- \* Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- \*\*\* Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- \*\*\*\* Transfers reported without a valid waste management code.

### For More Information . . .

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<u>A</u>	
New Industry	
Original Industry	

The largest marker in the state map represents the largest facility for on-site releases in the state of Oklahoma. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

	State/TRI Data
Population	3,453,250
Square Miles	68,679
Total Facilities	333
Total Forms	1,213
Form As	222

	Original Industry	New Industry	Total
National Rank for Total On- and Off-site Release			
Rank	30	39	35
Pounds	23,679,590	9,323,277	33,002,867
National Rank for Total On-site Releases**			
Rank	28	39	33
Pounds	20,670,359	8,375,349	29,045,708
National Rank for Total Releases within State***			
Rank	25	40	31
Pounds	34,900,994	8,881,783	43,782,777
National Rank for Production-related Waste Man	aged		
Rank	33	38	37
Pounds	129,063,399	16,611,572	145,674,972

- \* Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \* Includes amounts released at the facility. Excludes amounts transferred to other sites.
- \*\*\* Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.



## On-site and Off-site Releases for Top Five Chemicals Ranked on Total Releases in the State (All Chemicals)

			On-site	Releases		Off-site Releases		Off-site	Transfers to Di	isposal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
CAS		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
7664-41-7	Ammonia	6,360,388	81,341	3,080	3,978	1,207	6,449,994	831,815	1,207	0
_	Nitrate compounds	1,338	2,354,234	2,453,741	913	12,776	4,823,002	4,662,112	12,526	250
67-56-1	Methanol	2,927,502	9,054	0	12,568	1,800	2,950,924	4,115	0	1,800
_	Barium compounds	48,356	9,125	0	2,016,613	300,609	2,374,703	24,216	206,140	94,469
_	Zinc compounds	30,393	6,254	2,037	595,844	1,413,490	2,048,018	480,959	700,614	738,567

<sup>\*</sup> Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

### On-site and Off-site Releases for PBT Chemicals Ranked on Total Releases in the State

			On-site	Releases		Off-site Releases		Off-site	e Transfers to D	isposal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
CAS		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
Number	Chemical	Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
		Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
_	Polycyclic aromatic compounds	2,871.89	9.00	0.00	245.98	63,261.18	66,388.05	0.00	63,262.18	0.00
1336-36-3	Polychlorinated biphenyls (PCBs)	2.00	0.00	0.00	6,090.00	0.00	6,092.00	11.04	0.00	0.00
_	Mercury compounds	1,274.49	2.30	0.00	1,609.66	632.10	3,518.55	1,873.00	187.01	445.09
1582-09-8	Trifluralin	0.00	0.00	0.00	532.00	0.00	532.00	0.00	0.00	0.00
191-24-2	Benzo(g,h,i)perylene	150.14	1.00	0.00	15.22	2.20	168.56	0.00	2.20	0.00
7439-97-6	Mercury	69.23	1.09	0.00	27.31	2.23	99.86	445.50	2.23	0.00
_	Dioxin and dioxin-like compounds	0.15	0.00	0.00	0.86	0.17	1.19	0.04	0.17	0.00
_	Dioxin and dioxin-like compounds (in grams)	67.904	0.181	0.000	390.923	78.463	537.471	17.562	78.463	0.000
309-00-2	Aldrin	***	_	_	_	_	_	_	_	_
57-74-9	Chlordane	***	_	_	_	_	_	_	_	_
76-44-8	Heptachlor	***	_	_	_	_	_	_	_	_
118-74-1	Hexachlorobenzene	***	_	_	_	_	_	_	_	_
465-73-6	Isodrin	***	_	_	_	_	_	_	_	_
72-43-5	Methoxychlor	***	_	_	_	_	_	_	_	_
29082-74-4	Octachlorostyrene	***	_	_	_	_	_	_	_	_
40487-42-1	Pendimethalin	***	_	_	_	_	_	_	_	_
608-93-5	Pentachlorobenzene	***	_	_	_	_	_	_	_	_
79-94-7	Tetrabromobisphenol A	***	_	_	_	_	_	_	_	_
8001-35-2	Toxaphene	***	_	_	_	_	_	_	_	_

Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

<sup>\*\*</sup> The chemical ranking is based on the amounts in this column.

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<sup>\*\*\*</sup> No reports were submitted for these chemicals.

#### On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (All Chemicals)

			On-site		Off-site	Releases			
	Underground Injection On-site Releases to Land						(Transfers Off-	site to Disposal)	
		Surface	~· ·	C1 ****	RCRA	Other	Total		Transferred
The state of the s	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Within	Out of
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	State	State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Terra Nitrogen Ltd. L.P., Claremore, Rogers	3,108,000	217,050	0	0	0	1,250	3,326,300	0	0
Weyerhaeuser Co., Valliant, Mc Curtain	2,967,688	44,550	0	0	29,392	0	3,041,630	0	0
Safety-Kleen Lone & Grassy Mountain IncLone Mnt. Fac., Waynoka, Major	576	0	0	0	2,537,743	0	2,538,319	0	60,968
Farmland Inds. Inc., Enid, Garfield	2,396,490	21,510	0	0	0	500	2,418,500	0	0
Perma-fix Treatment Services, Tulsa, Tulsa	0	0	2,388,544	0	0	0	2,388,544	99,561	250
Protein Techs. Intl. Inc., Pryor, Mayes	54	1,797,700	0	0	0	3,775	1,801,529	0	0
Grand River Dam Authority Coal Fired Complex, Chouteau, Mayes	208,353	807	0	0	0	1,569,641	1,778,801	0	0
GMC Scg Oklahoma City Assembly, Oklahoma City, Oklahoma	1,038,179	0	0	0	0	0	1,038,179	9,127	13,993
Baker Petrolite Corp., Barnsdall, Osage	986,700	0	800	0	0	0	987,500	0	0
Terra Nitrogen Corp. Woodward Complex, Woodward, Woodward	653,765	42,050	0	0	0	0	695,815	0	0

<sup>\*</sup> The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

#### On-site and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (PBT Chemicals)

			On-site		Off-site	Releases			
	Underground Injection On-site Releases to Land						(Transfers Off-	site to Disposal)	
		Surface			RCRA	Other	Total	Transferred	
	Air	Water	Class I	Class II-V	Subtitle C	On-site Land	On-site	Within	Out of
Facility, City, County	Emissions	Discharges	Wells	Wells	Landfills	Releases	Releases*	State	State
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Safety-Kleen Lone & Grassy Mountain IncLone Mnt. Fac., Waynoka, Major	2.00	0.00	0.00	0.00	8,186.82	0.00	8,188.82	0.00	3.35
Conoco Inc. Ponca City Refy., Ponca City, Kay	1,286.00	11.00	0.00	0.00	0.00	151.00	1,448.00	1.00	10.00
Sinclair Oil Corp. Tulsa Refy., Tulsa, Tulsa	580.45	1.00	0.00	0.00	0.00	3.02	584.47	0.00	0.00
Apac Snyder Asphalt Plant, Snyder, Kiowa	343.10	0.00	0.00	0.00	0.00	0.00	343.10	0.00	0.00
Grand River Dam Authority Coal Fired Complex, Chouteau, Mayes	232.00	0.00	0.00	0.00	0.00	89.00	321.00	0.00	0.00
TPI Petroleum Inc., Ardmore, Carter	318.60	0.30	0.00	0.00	0.00	0.00	318.90	0.01	7.74
Muskogee Generating Station, Fort Gibson, Muskogee	250.00	0.00	0.00	0.00	0.00	0.00	250.00	2.00	0.00
Apac Shawnee Asphalt Plant, Shawnee, Pottawatomie	243.83	0.00	0.00	0.00	0.00	0.00	243.83	0.00	0.00
Apac Oklahoma HH Asphalt Plant, Luther, Oklahoma	238.38	0.00	0.00	0.00	0.00	0.00	238.38	0.00	0.00
Lone Star Inds. Inc. Pryor Cement Plant, Pryor, Mayes	225.00	0.00	0.00	0.00	0.00	12.00	237.00	0.00	0.00

<sup>\*</sup> The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

# Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (All Chemicals)

								Total	Total Non-
			Energy	Energy			Quantity	Production-	Production-
	Recycled	Recycled	Recovery	Recovery	Treated	Treated	Released On-	related	related
Facility, City, County	On-site	Off-site	On-site	Off-site	On-site	Off-site	and Off-site*	Waste Managed	Waste Managed
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Terra Nitrogen Ltd. L.P., Claremore, Rogers	2,333,000	73,000	0	0	0	0	3,231,910	5,637,910	73,000
Weyerhaeuser Co., Valliant, Mc Curtain	0	0	0	0	5,050,730	0	3,041,879	8,092,609	0
Safety-Kleen Lone & Grassy Mountain IncLone Mnt. Fac., Waynoka, Major	0	0	0	0	347,931	1,744	2,599,280	2,948,955	0
Perma-fix Treatment Services, Tulsa, Tulsa	0	0	0	0	4,908,713	250	2,488,110	7,397,073	10
Farmland Inds. Inc., Enid, Garfield	1,755,000	196,000	0	0	1,213,600	0	2,423,190	5,587,790	0
Protein Techs. Intl. Inc., Pryor, Mayes	0	0	0	0	20,757,397	0	1,801,529	22,558,926	0
Grand River Dam Authority Coal Fired Complex, Chouteau, Mayes	0	0	0	0	942,383	0	1,773,672	2,716,055	0
GMC Scg Oklahoma City Assembly, Oklahoma City, Oklahoma	0	219,320	0	44,700	60,990	33,470	1,058,100	1,416,580	0
Baker Petrolite Corp., Barnsdall, Osage	34,132,500	0	0	900	0	0	967,300	35,100,700	19,400
Zinc Corp. Of America, Bartlesville, Washington	0	0	0	0	0	0	819,473	819,473	58

<sup>\*</sup> The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

#### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (PBT Chemicals)

								Total	Total Non-
			Energy	Energy			Quantity	Production-	Production-
To the Charles	Recycled	Recycled	Recovery	Recovery	Treated	Treated	Released On-	related	related
Facility, City, County	On-site	Off-site	On-site	Off-site	On-site	Off-site	and Off-site*	Waste Managed	Waste Managed
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Sinclair Oil Corp. Tulsa Refy., Tulsa, Tulsa	0	0	79,335	0	0	2	77,609	156,946	472
Michelin N.A. Ardmore Plant, Ardmore, Carter	61,000	44,000	0	0	0	100	64,000	169,100	0
Safety-Kleen Lone & Grassy Mountain IncLone Mnt. Fac., Waynoka, Major	0	0	0	0	0	0	8,191	8,191	0
Conoco Inc. Ponca City Refy., Ponca City, Kay	0	183	0	15	0	2	1,458	1,658	0
Sunoco Inc., Tulsa, Tulsa	0	0	0	160	0	0	1,262	1,422	0
Bridgestone/Firestone Inc. Dayton Tire Div., Oklahoma City, Oklahoma	0	137	0	602	0	0	870	1,609	0
AES Shady Point Inc., Panama, Le Flore	0	0	0	0	0	0	701	701	0
Apac Snyder Asphalt Plant, Snyder, Kiowa	0	0	0	0	0	0	343	343	0
TPI Petroleum Inc., Ardmore, Carter	0	0	0	0	0	0	327	327	0
Grand River Dam Authority Coal Fired Complex, Chouteau, Mayes	0	0	0	0	0	0	320	320	0

The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.